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ABSTRACT

This paper presents a study of the organization of 60 junior school classrooms in Great Britain. The study was conducted to examine changes occurring as a result of the move towards comprehensive secondary education in Britain and as a result of the recommendations of the Plowden Committee for more individualized instruction at the primary level. In order to survey possible changes, classroom structure and teacher and student behaviors were observed in 60 junior classrooms. Although these observations indicated a change toward more flexible small group seating patterns, a concomitant change in the structure of the curriculum was not found. A traditional curriculum was still emphasized in most classrooms. In addition, the observations of the teachers indicated a high level of interaction with certain children, rather than with the whole group, small groups, or with each child in the class. Many of the teacher-student interactions involved task supervision. Within-group teaching and pupil-pupil interactions were not emphasized. Although the more traditional schools in the present sample had the highest achievement levels, the paper emphasizes the importance of considering a variety of variables before interpreting this result. The results of the study suggest the need for a greater emphasis on the internal organization of the classrooms at the junior level. (BD)

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SOME ASPECTS OF INTERNAL ORGANISATION OF PRIMARY EDUCATION IN BRITAIN

by

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SUMMARY

The move towards comprehensive education at secondary level in Britain has increased the freedom of action of teachers in the primary school, particularly in the junior age range.

The work described in this paper examines the organisation, and the activities taking place in 60 junior school classrooms. Although the teacher sustains a high level of interaction with the pupils it is mainly on an individual basis and is not shares out equally among the class. Group work as an alternative strategy is seldom used. The paper considers the implications of these findings and concludes that "informal" methods have not so much failed as have still to be tried.

1. Background to recent practice in the primary school

It has too readily been assumed that the ending of selection at eleven and the move to a comprehensive system of secondary education in Britain has led to a total transformation of primary schooling (1), now that teachers have been freed from the demands made on them by the 11+ examination. While it is true that in most primary classes today the pupils no longer sit in rows of desks and chant their multiplication tables endlessly, when not taking part in a spelling quiz, the so called "primary revolution" has not proceeded to anything like the same extent as some critics of our present schooling would have us believe (Boyson and Cox 1975). Barker Lunn (1970) found that 51% of teachers in her sample were still working in streamed schools but that an even greater proportion, (69%) retained positive attitudes to selection by ability. There are, however, probably wide variations in practice from area to area. For example, Bennett's (1976) study of teachers in Lancashire and Cumbria found that around 60% estimated that they spent an "above average amount of time talking to the whole class" whereas in a study of 900 teachers in Nottinghamshire by Bassey (1977) only 24% of junior school teachers spent more than half their time on class work. The ORACLE study (2) shows that the average amount of time that teachers spend on class teaching is only around 15% whereas from Bassey's data the figure would be closer to 30%.

In those situations where streaming and class teaching are no longer the norm there are a number of possible strategies (3) for organising learning. In Britain there has gradually evolved a preference for individualised teaching, sometimes using special topic groups, rather than the alternative practised in some other European countries, such as the USSR, where children in mixed ability groupings are still class taught. The seal of approval was given to these trends by the Plowden Committee Report (1967) which although endorsing the thinking of earlier reports and writings went much further in suggesting methods of translating these theories into practice.

The main direction in which the Committee wished to move primary teachers can be seen from their argument that "there has always been too much class instruction and we believe that there is still too much". Given also their support for the theories of Jean Piaget it is logical that they should also argue that individualisation was the key to effective learning and hence to effective teaching. The problem, however, as the Committee realised, was that with classes of over 30 pupils (4) individuals would average only six minute contact with their teacher per day. Teachers were therefore advised to teach together "small groups of children who are roughly at the same stage" although they were cautioned that

such groups should not become stable or be based on ability alone. Later the Committee stated that one of the strongest arguments in favour of groups was that it not only enabled children "to help one another" but also to improve themselves in that "they make their meaning clearer to themselves by having to explain it to others and gain some opportunity to teach as well as learn" (p.757). They also singled out for special attention several types of pupil whom it was claimed should particularly benefit from group work. Timid children needed to hear others put questions they were unable to frame for themselves while apathetic pupils might be infected by the enthusiasm of the group and the more able children benefit from being caught up "in the thrust and counter thrust of conversation in a small group of children similar to themselves".

Clearly, a teacher's role in organising these learning activities is a highly complex one but the Committee also indicated a clear preference for an "enquiry" approach to teaching with the emphasis on questioning and self discovery. Thus the stereotype of a typical Plowden classroom would be one where the children are highly active, engage in exploration and discovery for themselves, where questioning is of a high cognitive level concerned to identify and solve problems, where groups are formed and reformed and where within these groups pupils sometimes act as teachers for other children with learning difficulties. The teacher is also continually active moving around the classroom, consulting, guiding and stimulating either individual or groups of children in their tasks. Given that teachers are but human it is likely that, even in classrooms where this approach has been adopted, the patterns of behaviour will only approximate to this model. With this in mind a number of issues and possible areas of concern suggest themselves:

i. How far have these informal (5) classrooms altered the traditional patterns of class organisation and the manner of structuring the curriculum?

ii. In these classrooms how much individual attention does each pupil get in practice and how is it distributed between "advanced" and "backward" children, given Plowden's advice to compensate for pupils with difficulties?

iii. What is the quality of this attention and how far does it encourage pupils to discover, explore and problem solve?

iv. What is the nature of the exchanges taking place between pupils within small groups? How are these groups formed and are they flexible?

v. Is there any evidence to suggest that pupils taught by these informal methods reach the same level of achievement as pupils taught by traditional class teaching?

The remainder of this paper examines these questions in the light of our own and other research which has been carried out in Britain since the publication of the Plowden Report.

2. Background to recent research in the primary school

The research on which the following descriptions are based has as its main objective the study of pupil and teacher behaviour within the classroom. The chief research technique has been that of interaction analysis (6) developed in the United States of America by the Child Development Movement in the 1920s. At the latest count there are over 200 observation systems in operation there, the best known being FIAC, the Flanders Interaction Analysis Category system, (Flanders 1960). Nearly all of these systems are however totally unsuitable for British primary classrooms where there is considerable teacher mobility so that researchers here have been forced to develop their own (Galton 1978).

The ORACLE project uses a Pupil Record (Boydell 1975) and a Teacher Record (Boydell 1974), both developed at leicester in earlier studies. For the Pupil Record eight "target" children were selected at random from a stratified ability sample, (two bright, two dull, and four average pupils with equal numbers of boys and girls in each group). Observers recorded a pupil's behaviour at 25 second intervals for 10 signals before switching onto the next target. Teachers were observed in a similar manner but for double the number of signals. Six lots of observations were made on each pupil during each of the three terms in a school year and some pupils are observed over three years. Additional information was also collected about timetables, class organisation and grouping arrangements during each visit.

3. Differences in organisation and curriculum structure in the sample primary schools

The three areas of the country in which the data were collected all have established systems of comprehensive education at secondary level. They can therefore be expected to have moved furthest towards the "Plowden" ideal. Table 1 shows the main organisational characteristics of these classrooms.

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In most classes the children are seated in groups with an average of five to six children per table. Although only about 22% of the teachers seat the children permanently in groups by ability over a third use it for some part of their teaching. These figures are a little lower than in other areas of the country. Bassey (1977) found that about 36% of this sample had permanent fixed groups, the majority making reading and mathematics attainment a criteria for their composition. The figures from Bennett's (1976) survey in the North West of England showed that nearly a third of the teachers streamed within the classroom. However, the data does show that there has been a swing away from seating by ability within classrooms since Barker Lunn carried out her study. Bassey's data on infant classes show, as one might expect, even less grouping by ability where only 15% seat in this way.

Given that a majority have moved away from rigid grouping patterns a more flexible pattern in the organisation of curriculum might be expected. This is not borne out, however, from table 2.

Over half the schools still have single subject teaching and regular tests in mathematics while two-thirds of the teachers carry out frequent spelling tests. The emphasis given to assessment of spelling is reflected in the time given to different areas of the curriculum. This data was obtained from the Teacher Record by expressing the total number of observations taking place within a curricular area as the percentage of the total number of observations. Table 3 shows that the pattern is still largely traditional. The greatest amount of time is given to writing, even greater if general studies (History, Geography, Topics) are included. Nearly half the time given to mathematics is given to basic number work and together writing and mathematics take up to half the allocated time. Spoken English which might have been expected to show an increase receives little attention and perhaps surprisingly so does reading in view of the difficulties currently experienced at the secondary level. The over-all pattern is still, however, fairly traditional and corresponds well with the estimates obtained from other survey data.

4. Distribution of attention within the classroom

Table 4 shows the percentage of teacher and pupil contact taking place and expressed as percentage of total observation time. The Teacher Record data shows what the teacher is doing while the Pupil Record provides the view of the classroom through an individual pupil's eye. It can be seen that there is a sharp discrepancy between the two viewpoints. For a teacher the predominant form of contact is through talking to individuals, accounting for over 55% of his time. There is

relatively little class teaching and even less in groups despite the Plowden recommendation. The pupil, however, sees things very differently. He spends nearly all his time alone without any contact with the teacher. Even though the teacher spends only 15% of his time talking to the whole class this is likely to account for the greatest amount of contact for any individual pupil within it. These figures are an average based on the total number of observations with all pupils. Variations across classes are quite large as is shown in table 5. Inside these classes the study confirms the earlier findings, (Garner and Bing 1973). Two types of pupil come in for the greatest amount of attention. First there is the highly motivated able child who initiates a large number of interactions with the teacher mostly connected with marking work. Second there is the noisy disruptive pupil, usually less able, also is the subject of frequent teacher attention. In classrooms where noise is kept to a minimum the latter type of pupil will receive an even greater amount of a teacher's time. Both types of pupils singled out by Plowden, the timid and the apathetic do particularly badly in this situation. Yet their level of attention to task work is high. The highest average for any class is over 71%, the lowest 43%. Some of these quiet pupils achieve higher levels individually in spite of having little contact with their teacher.

5. Quality of task interactions

The Teacher Record enables an analysis of the different types of teacher-pupil interaction so that their quality may be measured. 45% of all observations are concerned with teachers making statements, mostly concerned with task supervision. Questions account for only 12% of the total. Open questions, those which would be expected to promote enquiry, occupy a very small proportion of this total which is mostly devoted to exchanging factual information and supervising work. The analysis of teacher statements show a similar pattern. Statements which express ideas account for 5.6% of the total. The largest proportion of time is spent telling pupils what to do (28.1%), providing feedback (21.4%) and giving facts (15.4%). Here again the Plowden report's encouragement towards enquiry based teaching appears not to have been taken up to any large extent in these classes.

6. Pupil interaction within groups

Another suggestion to come from Plowden was that some compensation for the lack of individual attention could be obtained by the children working together in small groups where there would be opportunities for "teaching as well as learning". Group teaching, as a deliberate strategy, appears to be little used. Only 10% of all work observed was done in

co-operative groups. Informal groupings do exist since most children are at tables and within this setting pupil-pupil interaction can take place. This type of interaction, however, accounts for only 18.6% of the total amount. Of this figure only 28% is concerned with task work, about 5% of the total figure. The observation data shows that these pupil-pupil interactions are of very short duration, few extending over more than one 25 second time interval. As such they can have little to do with the "cut and thrust of counter argument" which Plowden suggested would stimulate pupils. Pupils generally interact while borrowing pencils, rubbers and by way of light relief from concentrating on their individual tasks. Whatever the arrangements for forming these groups, (whether ability, friendship or randomly) the groups inevitably contain both boys and girls. Yet the observation data shows that over 80% of all pupil-pupil interactions are with pupils of the same sex. It is clear that mixing the sexes, however desirable on other accounts, appears to be the factor in minimising conversation between children.

7. Achievement of pupils in the primary school

The most controversial research finding in Britain of recent years has been that of Bennett (1976), who found that in his sample traditionally organised classrooms were up to half a year ahead in their level of achievement compared to pupils in informally organised ones. The study has been heavily criticised elsewhere (Gray and Satterley, 1976) on the grounds of its research design and the method of statistical analysis. Using the observational data and the other information collected by the observers while in the classroom, Bennett's study has been replicated in a different sample of schools across a wider age range. Although the traditional schools still do best in the ORACLE sample it is at the expense of "mixed" rather than the informal ones and the largest factor accounting for these differences is the experience of the teachers. It needs to be pointed out that these results refer only to the basic skills and, unlike earlier studies which actually singled out exceptional examples for comparison, both Bennett and the ORACLE samples are naturalistic ones. The observation data show that there are very few differences in behaviour between teachers with different forms of classroom organisation. No category on the Teacher Record discriminates between the different organisational strategies. Other factors beside attainment must also be considered. In a sub-sample of pupils who transferred at nine from first school to a middle school it has been shown that the anxiety levels of pupils in the "traditional" schools increased considerably six months before transfer.

Conclusion

The data would suggest that, although the external forms of organisation have changed, little has altered inside the classroom apart from replacing desks by tables. Pupils obtain very little individual attention yet manage to maintain a high level of involvement in their work. It is all too easy to criticise the teachers although the data indicates that they are interacting continually with the pupils and it is the class size more than any other factor which prevents reasonable levels of contact with individuals. Neither do the results, taken as a whole, suggest that a return to streaming and class teaching would provide a satisfactory alternative. One answer would appear to be a greater involvement in group activity as Plowden originally suggested. Group activity is almost non-existent in junior school classrooms in Britain. Although most of the data reported here refer to junior classes that obtained in earlier small-scale studies of infants suggests similar patterns (Garner 1972: Resnick 1972). Researchers seemed to have failed to provide the teacher with any alternative means of organising groups effectively other than by attainment or friendship choice. Those responsible for training teachers seem to spend little time in teaching their students how to evaluate the quality of the pupil-pupil interactions taking place or even how to increase the number above the dismally low proportion at present occurring. It is too early to write off the new approaches to primary teaching in Britain. It is not that they have failed but rather that they have never yet been tried.

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Notes

(1) The term primary was originally attached to all schooling from the age of 5 to 11 when under the terms of the 1944 Education Act all pupils transferred to secondary level. Most of the schools were divided into infant (5-7) and junior (7-11) although there is now an increasing tendency to merge the two departments into one first school under a single head. In 1964, however, a further act made it possible to establish middle schools covering the 9-13 age range. In 1967 the Plowden Committee recommended that primary education should be organised in two stages, (first schools from 5-8 and middle school from 8-12) in effect adding an extra year before transfer to the secondary stage. All three options can be found in different local authority areas.

(2) ORACLE (Observational Research and Classroom Learning Evaluation) is a five-year programme of research, sponsored by the Social Science Research Council and jointly directed by Professor Brian Simon and Maurice Galton at the School of Education, University of Leicester. It is mainly a process-product study in which a variety of teacher and pupil behaviours are systematically observed and then related to a wide range of learning outcomes, in the context of different classroom organisation.

Sixty classrooms in three local authority areas are being studied covering the different types of school from "first" to "middle" with an age range of 8+ to 13+. Detailed case studies of some of these children are then continued after they have transferred to the next stage of schooling. Further details can be obtained from the Secretary, ORACLE, School of Education, 21 University Road, Leicester LE1 7RF, England.

(3) Researchers using systematic observation make an important distinction between teaching strategies and teaching tactics. Strategies are of three kinds, organisational, covering grouping and seating arrangements, curricula, dealing with timetables and the selection of content within a subject and teaching to do with the general method of presentation, (didactic or enquiry). Tactics are to do with the minute by minute behaviours by which strategies are implemented.

(4) The latest Department of Education and Science statistics state that 41% of primary classes are either this size or even larger.

(5) The terms "informal" and "formal" are used to denote different teaching strategies. Formal classes are said to use ability groups, single subject timetables and favour a didactic approach whereas informal ones do not select by ability, have integrated subject teaching and operate enquiry methods. Similar distinctions are made when referring to traditional and progressive classes although, as this paper shows, these differences are not so great in practice.

(6) Interaction Analysis or classroom observation involves recording both verbal and non verbal behaviour systematically as it happens in the classroom. An observer records events in carefully defined categories at regular intervals and then sums these category totals to give an estimate of the time spent by teachers and pupils on various activities.

Table 1

Main organisational characteristics of 58 classrooms in ORACLE study (smallest size 20; largest 38)

	YES	NO
Pupils seated in groups	54	4
Classes vertically grouped (more than one year group)	15	43
Team teaching	10	48
Pupils seated by ability	12	45
Pupils quiet while working	36	22
Pupils free to move without permission	28	30
Pupils get regular homework	3	55

Table 2

Organisation and structure of the curriculum

	YES	NO
Single subject teaching	34	24
Regular mathematics tests	33	25
Regular spelling tests	41	17

Table 3

Percentage of total observation related to each subject area

Number work	13.7
Other mathematics	14.8
Reading	6.8
Writing	22.6
Spoken English	2.8
Art/craft	8.8
General Studies	16.0
Other (Television, Stories etc)	13.5

Table 4

Percentage distribution of teachers' and pupil's time

	Teacher	Pupil
Individual attention	55.8	2.2
Group attention	7.5	1.5
Class attention	15.1	11.8
Not interacting	21.6	84.5

Table 5

Distribution of teacher-pupil interaction
(class averages, highest = 44%; lowest 6%)

Percentage	Below 10%	10-19	20-29	30%+
No. classes	4	9	31	16

Table 6

Variation in teachers questioning (as percentage of total questions)

Questions of fact	28.9
Closed questions	18.2
Open questions	5.0
Questions supervising tasks	32.2
Questions dealing with routine	14.9

REFERENCES

BARKER LUNN, J C (1970) Streaming in the primary school, (NFER, Slough) 26-7, 55, 81.

BASSEY, M (1977) Nine hundred primary school teachers, Nottingham Trent Polytechnic, (Nottinghamshire Primary Schools Research Project).

BENNETT, N (1976) Teaching styles and pupil progress, Open Books.

BOYDELL, D (1974) "Teacher-pupil contact in junior classrooms", British Journal of Educational Psychology, Vol. 44, pp 313-318.

BOYDELL, D (1975) "Pupil behaviour in junior classrooms", British Journal of Educational Psychology, Vol. 45, pp 122-129.

BOYSON, R and COX, C (1975) (eds), Black Paper: The fight for education, (Dent, London).

FLANDERS, N (1960) "Teacher influence on pupil attitudes and achievement", Final report, Cooperative Research Programme Project No. 397, Minneapolis: University of Minnesota.

GALTON, M J (1978) British Mirrors: A collection of classroom observation systems, School of Education, University of Leicester.

GARNER, J (1972) "Some Aspects of Behaviour in Infant School Classrooms", Research in Education, 7, pp 28-47.

GARNER, J and BING, M (1973) "Inequalities of Teacher-Pupil Contacts", British Journal of Educational Psychology, 43, No. 5 pp 234-243.

GRAY, J and SATTERLY, D (1976) "A Chapter of Errors: Teaching Styles and Pupil Progress in Retrospect", Educational Research, 19, pp 45-56.

PLOWDEN REPORT, (1967) Children and their Primary Schools, Report of the Central Advisory Council for Education (England), HMSO London.

RESNICK, L (1972) "Teacher Behaviour in the Informal Classroom", Journal Curriculum Studies, 4, pp 99-109.